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DATE MAILED: 04/15/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
10/664,100	09/17/2003	Philip D. Nguyen	HES 2001-IP-005407U1	3701
29920 7590 04/15/2005 JOHN W. WUSTENBERG P.O. BOX 1431			EXAMINER NEUDER, WILLIAM P	
DUNCAN, OK			ART UNIT	PAPER NUMBER

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)			
Office Action Summary		10/664,100	NGUYEN, PHILIP D.			
		Examiner	Art Unit			
	The MAILING DATE of this communication	William P Neuder	3672			
Period f	• •					
- Externation after - If the - If NO - Failu Any	IORTENED STATUTORY PERIOD FOR RE MAILING DATE OF THIS COMMUNICATIO incisors of time may be available under the provisions of 37 CFF SIX (6) MONTHS from the mailing date of this communication, period for reply is specified above is less than thirty (30) days, a period for reply is specified above, the maximum statutory per to reply which have seen to reply which have the value of the set or set when the set or set and period for reply will, by size reply received by the Office later than three months after the mid of plant term sulgistment. See 37 CFR 1.704(b).	I/N. R 1.136(a). In no event, however, may a reply be tile. reply within the statutory minimum of thirty (30) darended will apply and will expire SIX (6) MONTHS from	mely filed ys will be considered timely.			
Status						
1)	Responsive to communication(s) filed on _					
2a) <u></u> □	This action is FINAL. 2b)⊠ T	his action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
4) Claim(s) 1-18 is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)[5) Claim(s) is/are allowed.					
6)⊠	☑ Claim(s) <u>1-5,7-11 and 13-17</u> is/are rejected.					
7)⊠	Claim(s) <u>6.12 and 18</u> is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application	on Papers					
9)[The specification is objected to by the Exami	ner	•			
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a)						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to Sec 37 CER 4 104(4)						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
	nder 35 U.S.C. § 119					
12) 🗀 A	cknowledgment is made of a claim for foreign	on priority under 35 U.S.C. & 440(a)	(4) (5)			
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No.						
3	 Copies of the certified copies of the pri 	ority documents have been received	d in this National Stage			
	application from the International Burea	au (PCT Rule 17,2(a)).				
- 56	ee the attached detailed Office action for a lis	st of the certified copies not received	i.			
ttachment(s	s)					
Notice of References Cited (PTO₁892)						
) U Notice	Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date.					
Informa Paper f	ation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 No(s)/Mail Date 9/17/03.	 Notice of Informal Pal Other: 	tent Application (PTO-152)			
Patent and Trad	emark Office	-,				

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

Claims 1-3,7-9,11 and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Reimers et al (6.065.538).

Reimers discloses an apparatus and method for sensing data associated with fracturing a subterranean formation (see col. 9, lines 35-57). At least one sensor 420 senses the data associated with the fracturing and for transmitting signals to a receiver 432. Figure 5 shows the receiver carried on a down hole tool lowered into the well. Transmitter 438 may also be located below ground (see col. 8, lines 24-26). As to claims 2,11 and 14, sensors 420 are located on the tool (see fig. 5). As to claims 3, 8 and 15, the signals generated by the sensors and transmitters can be conducted during introduction of the fracturing fluid (see col. 9, lines 35-57). As to claim 9, an acoustic signal is generated to initiate operation of the sensor.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 3672

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 4,5,10,16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reimers et al (applied above) in view of Restarick et al (6554064).

Reimers is considered to teach all of the claimed features except for the receiver initiating operation of the sensors and the system being electrical. Restarick et al teaches that the sensor may be turned on by sending a "turn on" command from the receiver (see col. 5, lines 60-65). It would have been obvious to use a step of turning on the sensor in reamers as taught by Restarick since the use of a turn on signal conserves power and extends life of the sensor. As to claims 5, 10 and 17, Restarick et al teaches that the use of electrical sensors and conductors for sensing pressure and flow are well known. It would have been considered obvious to use an electrical system as taught by Restarick in the system of Reimers et al since any known sensing system could be substituted for any other known system as long as the device function would not be changed.

Allowable Subject Matter

Claims 6,12 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P Neuder whose telephone number is 571-272-7032. The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William P Neuder Primary Examiner Art Unit 3672

W.P.N.